



Working Group #3: Emergency Alert System

Co-Chairs:

Clay Freinwald, Clay Freinwald Technical Services

Larry Walke, National Association of Broadcasters

Working Group Objectives

This Working Group has been tasked with developing recommendations for the CSRIC's consideration regarding actions the FCC should take to improve the Emergency Alert System.

- ▶ **State EAS Plans.** Recommend steps to improve the process for developing and submitting state EAS plans to the Commission.
 - Final Report: Submitted March 2014.
- ▶ **Nationwide EAS Test/Operational Issues.** Address other EAS-related issues as assigned to CSRIC by the FCC, including FCC NPRM.
 - Final Report: Submitted June 2014.
- ▶ **EAS Security.** Recommend actions to improve promote the security of the EAS.
 - EAS Cybersecurity Best Practices: Initial Report Submitted June 2014.

Participants: 42 Members (as of March 18, 2015)

- ▶ Adrienne Abbott
- ▶ John Archer
- ▶ John Benedict
- ▶ Ron Boyer
- ▶ Ben Brinitzer
- ▶ Ted Buehner
- ▶ Roswell Clark
- ▶ Kimberly Culp
- ▶ Edward Czarnecki
- ▶ David Donovan
- ▶ Chris Fine
- ▶ Les Garrenton
- ▶ Mike Gerber
- ▶ Suzanne Goucher
- ▶ Neil Graves
- ▶ Craig Hoden
- ▶ Chris Homer
- ▶ Steve Johnson
- ▶ Alfred Kenyon
- ▶ Wayne Luplow
- ▶ Bruce McFarlane
- ▶ Dan Mettler
- Nevada EAS Chair
- SiriusXM
- CenturyLink
- Boyer Broadband
- Society of Broadcast Engineers
- National Weather Service
- Cox Media Group
- Larimer Emergency Telephone Authority
- Monroe Electronics
- NY State Association of Broadcasters
- Goldman Sachs
- LIN Media
- NOAA
- Maine Association of Broadcasters
- SNR Systems (formerly FEMA IPAWS)
- NOAA
- Public Broadcasting Service
- Johnson Telecom
- FEMA IPAWS
- LGE/Zenith
- Fairfax County
- Clear Channel Media + Entertainment

Participants (cont'd)

▶ David Munson	FCC Liaison
▶ Brian Oliger	Hubbard Radio/WTOP
▶ Darryl Parker	TFT, Inc.
▶ Rich Parker	Vermont Public Radio
▶ Jerry Parkins	Comcast Cable
▶ Efraim Petel	AtHoc, Inc.
▶ Richard Perlotto	Shadowserver Foundation
▶ Joey Peters	MyStateUSA, Inc.
▶ Peter Poulos	Citi
▶ Harold Price	Sage Alerting Systems
▶ Richard Rudman	Broadcast Warning Working Group
▶ Francisco Sanchez, Jr.	Harris County (TX) Office of Homeland Security
▶ Tim Schott	NOAA
▶ Andy Scott	NCTA
▶ Bill Schully	DirecTV
▶ Gary Smith	KTAR Phoenix, Arizona SECC
▶ Matthew Straeb	Global Security Systems/ALERT FM
▶ Gary Timm	SRA International
▶ Leonardo Velazquez	AT&T U-Verse
▶ Michael Watson	Gray Television Group
▶ Kelly Williams	NAB
▶ Reed Wilson	Belo Corp.

WG3: EAS

Cybersecurity Initial Report

- Submitted to CSRIC in June 2014.
- Report addressed needs for information assurance and security controls throughout the EAS system.
- Recommended Best Practices for EAS cyber hygiene.
 - EAS Participant Networks and Operations
 - EAS Alert Originators
 - EAS Device Manufacturers

WG3: EAS Security

Phase Two

- Develop recommendations on how the Commission can promote and facilitate awareness and adoption of the “best practices” guidelines contained in the WG3 Initial report.
- Particular focus on smaller-sized and rural entities.

WG3: EAS Security Subcommittee

Phase Two Co-Chairs:

Gary Smith Cherry Creek Radio

Larry Walke National Association of Broadcasters

WG3: EAS Security

➤ Process

- Leadership
- Expand Membership
- Collaborative, inclusive approach
- Weekly Conference Calls

➤ Scope of Project

- Focus on education and outreach
- Refrain from creating new content
- Consideration of all players in EAS ecosystem
- Review of all potential avenues for contact with EAS participants.

WG3: EAS Security

➤ Purpose

- EAS = critical public warning system.
- Legacy EAS/daisy chain system.
- Integrated Public Alert and Warning System (IPAWS).
 - Digital EAS via IP networks direct to EAS participants.
- Vulnerabilities
 - Human error
 - Intentional disruptions: viruses, malware, false alerts.

WG3: EAS Security

- Minimize EAS security risks.
 - Step One. Creation of general Best Practices that are flexible and adaptable to various enterprises.
 - Step Two. Outreach, education, awareness.
 - Step Three. Implementation of Best Practices.
- Focus on smaller-sized and rural entities.
 - End of legacy EAS daisy chain.
 - Most vulnerable to cyber intrusions.
 - Limited resources cause unique challenges.
 - Access to information.
 - Lack of full-time engineering staff, or those with cyber expertise.
 - Costs of preventative measures.

WG3: EAS Security Recommendations

Government

➤ FCC

- Use WG3 Initial Report to draft a series of user-friendly Best Practices tailored to subsets of EAS ecosystem (*e.g.*, radio, cable, rural).
- Prominently display Best Practices on FCC website, highlighted in FCC documents.
- Revise EAS Handbooks to include cybersecurity guidance.
- FCC Webinars and Webcasts.
- FCC Public Advisories and Notices.

➤ FEMA

- Educate alert originators.
- Alerting Best Practices Webinar Series
- Alert Origination Service Provider Webinar Series.
- Additional webinar targeted to EAS participants.

WG3: EAS Security Recommendations

Industry

- ▶ FCC should invite industry organizations to extend efforts through targeted outreach to their constituencies.
- ▶ Outreach methods:
 - ▶ Webcasts, webinars, teleconferences.
 - ▶ Training, professional certification.
 - ▶ Conventions, conferences, policy forums.
 - ▶ FCC experts.
 - ▶ Newsletters, email, social media.
 - ▶ Cybersecurity web pages, FCC links.
 - ▶ Trade publications.
- ▶ Cybersecurity Awareness Month.

WG3: EAS Security

- ▶ Final Recommendation:
 - Cybersecurity threats to EAS will continue to evolve.
 - FCC must periodically assess the content and process of EAS security outreach.
 - FCC should strive to continuously refine and improve its efforts to educate EAS participants on cyber risks.



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